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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,297	06/13/2001	Ryoji Asada	MAT-8144US	5545

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EXAMINER

HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/880,297	ASADA ET AL.	
	Examiner	Art Unit	
	Timothy J. Henn	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 and 14-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/22/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of species related to figure 1 and sub-species related to figure 5 in the reply filed on 20 April 2005 is acknowledged. The traversal is on the ground(s) that of the presence of non-elected claims which depend from independent claim 1. This is not found persuasive because although claim 1 may be generic to some species/sub-species all of the claims which depend from it are not generic to the same species/sub-species.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. The drawings are objected to because: In figures 2, 5, 9, 10 and 16 it is difficult to distinguish between the functional blocks (e.g. items 8, 9, 10, 11, 12, 13 and 15 in figure 2) and the labeling blocks (e.g. "(n/2) Multiplier" and "Drive Pulse Switching Circuit" in figure 2). Labeling the blocks (e.g. "(n/2) Multiplier" and "Drive Pulse Switching Circuit" in figure 2) in a manner such as the "VCR Unit" (item 24) in figure 8 is suggested.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Figures 19 and 20 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter referred to as AAPA) in view of Schmale (WO 00/02382).

[claim 1]

Regarding claim 1, AAPA discloses a CCD imaging device (Figure 19) comprising a CCD operable in a progressive scanning mode (Figure 19, Item 51; p. 3, l. 23 - p. 4, l. 12); a drive pulse switching circuit (Figure 19, Item 53) for generating a CCD read pulse at a first frame rate and for generating a CCD drive pulse at a second frame rate being $n/2$ times the first frame rate, n being an integer (e.g. $n=2$; p. 2, ll. 17-24; p. 3, l. 23 - p. 4, l. 2); a CCD driver for driving the CCD (Figure 19, Item 52) and a camera signal processing circuit for performing a camera process (Figure 19, Item 54; p. 4, l. 26 - p. 5, l. 4). Therefore it can be seen that AAPA lacks a frame memory for storing an output signal of the CCD in one frame after the read pulse, and for reading the stored output signal of the CCD $n/2$ times.

Schmale discloses a camera including a memory circuit (8) which stores the output of a CCD (2) prior to reading out the stored signal and sending it to a signal-processing circuit (3). The memory circuit of Schmale allows a user "freeze" a scene so

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that adjustments to the camera signal processing can be made without requiring the scene to remain motionless (e.g. p. 4, ll. 14-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a memory circuit such as the one disclosed by Schmale before the camera signal processing circuit of AAPA to allow a user to "freeze" a scene and make adjustments to the signal processing circuit without requiring the scene to be motionless.

[claim 2]

Regarding claim 2, AAPA discloses a recording unit (Figure 19, Item 56).

[claim 3]

Regarding claim 3, AAPA does not specifically disclose a reproduced signal converter capable of outputting a reproduced signal of the recorder unit at first and second frame rates. Official Notice is taken that it is notoriously well known in the art to provide reproduction means in camera attached vcr-units such as the one described by AAPA to allow the user to review material on an external monitor which was previously recorded. The examiner notes that such a reproduction unit would inherently be capable of outputting a reproduced signal at a first frame rate and a second frame rate which is equal to the first frame rate (e.g. $n=2$). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reproduction unit to allow the user to review previously recorded material.

[claim 8]

Regarding claim 8, AAPA in view of Schmale does not disclose a frame rate equalizing controller for enabling the CCD to output both a signal of the first frame rate

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and a third frame rate, wherein the second frame rate is a common multiple of the first and third frame rates. Official Notice is taken that it is well known in the art to provide CCD devices with the means for outputting signals at varying frame rates in order allow for normal recording at normal frame rates and recording of events with rapid motion at faster frame rates. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a frame rate selector or "frame rate equalizing circuit" in the device of AAPA in view of Schmale to allow for capture of images at varying frame rates.

[claim 9]

Regarding claim 9, Official Notice is taken that captured images at 60fps is notoriously well known in the art and would have been obvious to one of ordinary skill at the time the invention was made.

[claim 10]

Regarding claim 10, AAPA discloses a recording unit (56) for recording a signal from the camera processing circuit.

[claims 11 and 12]

Regarding claims 11 and 12, AAPA does not specifically disclose a reproduced signal converter capable of outputting a reproduced signal of the recorder unit at first and second frame rates. Official Notice is taken that it is notoriously well known in the art to provide reproduction means in camera attached vcr-units such as the one described by AAPA to allow the user to review material which was previously recorded. The examiner notes that such a reproduction unit would inherently be capable of

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outputting a reproduced signal at a first frame rate and a second frame rate which is equal to the first frame rate (e.g. $n=2$). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reproduction unit to allow the user to review previously recorded material.

7. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter referred to as AAPA) in view of Schmale (WO 00/02382) as applied to claims 3 and 12 respectively above, and further in view of Tanaka et al. (US 6,075,565).

[claims 4 and 13]

Regarding claim 4, AAPA discloses a viewfinder (55) for displaying an output signal of the camera signal processing circuit (54). Official Notice is taken that it is notoriously well known in the art to provide reproduction means in camera attached vcr-units such as the one described by AAPA to allow the user to review material on a viewfinder which was previously recorded. The examiner notes that such a reproduction unit would inherently be capable of outputting a reproduced signal, However AAPA in view of Schmale but does not disclose converting the reproduced signal from said recorder unit to a second frame rate.

Tanaka discloses converting a signal to be output to a viewfinder by increasing the frame rate in order to reduce picture deterioration (Figure 17; c. 1, l. 56 - c. 2, l. 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

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invention was made convert the signal output to the viewfinder as taught by Tanaka to avoid picture deterioration.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571) 272-7310. The examiner can normally be reached on M-F 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJH
5/9/2005


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